

Still no evidence in Evansville; however, last week on June 26, the emerald ash borer (EAB) was found in Janesville, the first case of EAB in Rock County. This brings the number of infected Wisconsin counties to 12.

EAB is not a threat to human health, but it kills ash trees. EAB is an invasive insect, accidentally brought into the United States from China. It was first identified in the US in 2002 with a massive die-off of ash trees in Detroit, Michigan. EAB has spread quickly over the last decade and was identified in Wisconsin in 2008. It is estimated that 50 million ash trees are now dead or dying in the Midwest due to EAB.

It has not been a matter of if EAB will be found locally; it has been a matter of when it will arrive.

What Is EAB?

The emerald ash borer is a wood-boring beetle native to parts of Asia. EAB feeds on all native ash species: green, white, black, and blue ash. And it kills the trees. It does not infect mountain ash which is not a true ash tree.

The adult EAB lays eggs in the folds of ash tree bark in early summer. When they hatch, the larva chews its way into the tree. It winds back and forth as it feeds, creating characteristic S-shaped patterns under the bark. It feeds for one to two years, and can survive in green wood (such as firewood) as long as the bark is intact. The feeding damages the tree's cambial layer, effectively girdling the tree from top to bottom. The tree's impaired ability to transport water and nutrients results in its death.

After its larval stage, the EAB pupates then chews its way out through the bark. The adult EAB can then mate and lay eggs in other ash trees. The adult is thought to have a flight range of about a half mile. But EAB also spreads by human transport of infected wood; EAB was accidentally brought into the United States via wooden shipping crates. This is why a quarantine of Rock County is now pending.

What Should We Expect?

Within a week or two of the EAB discovery in Rock County, the United States Department of Agriculture (USDA) and the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) will quarantine Rock County to prevent the transport of hardwood firewood (all species), ash tree nursery stock, and ash logs and timber outside of the county.

They will work with local businesses to ensure compliance. For most residents, the quarantine will mean you cannot bring Rock County (or other quarantined county) firewood with you for a camping trip up north.

The main purpose of the quarantine is to slow the spread of EAB in the expectation that predatory wasps, more economical methods of chemical treatment, or other means may be discovered to halt EAB.

EAB will strike cities and villages especially hard. Though ash makes up about seven percent of trees in Wisconsin's rural forests, it makes up about twenty percent of the trees in our urban forest. In Evansville, ash trees comprise about fifteen percent of trees on public property. It will likely be a couple years before ash trees start to die in Evansville, but when they do it will be quick.

Does the City Have a Plan?

We estimate there are around 350 ash trees in the parks, terraces, and other public property. Chemical treatments may protect trees from EAB at a cost around \$50 to \$150 every year for each individual tree, depending on tree size and specific chemical. The city does not plan to chemically treat ash trees on public property.

The last couple of years, we have considered EAB to be an eventuality. We have stopped planting ash trees in the parks and terraces and encouraged a diversity of tree species on public (and private) property.

At present our Department of Public Works expects staff to remove trees as they die on public property; although, this may change if the amount of work proves to be beyond their ability to accomplish in balance with other work responsibilities. Tree removal is particularly important since dead branches and trees are especially prone to storm damage, resulting in power outages and blocked streets and posing a danger to nearby people and property.

Recognizing that there will be a lot of waste wood material to dispose, the city installed a woodburning furnace at the Public Works Garage last fall. Accounting for degree days, during the four months December 2011 through March 2012, the woodburner saved over 2100 therms and reduced heating costs by \$1,662.

The city does have regulations of diseased trees on private property from the 1970's regarding Dutch Elm Disease. The regulations may be updated to include EAB, but the City Council has not actively discussed any such ordinance or policy.

What Can Individuals Do?

Mature trees provide beauty to our yards, they shade and cool our homes, and they add to our property values. An individual property owner with a few ash trees may find it economical to chemically treat them to prevent EAB infection. There are several chemical options available professionally or for the do-it-yourselfer. The DATCP website at the end of this article contains extensive information about insecticide options.

Diseased and dead trees should be removed to prevent dangers from falling branches or tree failure. And they should be appropriately disposed to avoid spreading of the EAB.

When Dutch Elm Disease devastated our neighborhoods a generation ago, the ash tree was a popular replacement for planting new trees. We did plant other species, but it has become evident that a diversity of tree species is best for a healthy and sustainable urban forest. Maple, oak, linden, honey locust, Kentucky coffeetree, hackberry, disease-

resistant elm, gingko, and other species are suited to our habitat and help ensure a variety of trees. Replacement trees, or any new planting for that matter, should continue to emphasize a variety of species.

For more information or to discuss ash trees in your yard, call UW Extension Horticulture Educator for Rock County Mike Maddox at 757-5696. The Department of Agriculture, Trade, and Consumer Protection also has a lot of EAB information available at <http://datcpservices.wisconsin.gov/eab/index.jsp>.